(FILE 'HOME' ENTERED AT 17:37:09 ON 08 JUL 2004)

FILE 'MEDLINE, CAPLUS, BIOSIS' ENTERED AT 17:37:24 ON 08 JUL 2004

L1 16 S (DETECT? OR IDENT? OR QUANT?) (P) (AERUGINOSA) (P) (RRNA) (P)

L2 10 DUP REM L1 (6 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 17:42:01 ON 08 JUL 2004

FILE 'MEDLINE, CAPLUS, BIOSIS' ENTERED AT 17:47:29 ON 08 JUL 2004

L3 87 S AERUGINOSA AND "5S"

L4 65 S AERUGINOSA (P) "5S"

L5 59 S L4 AND PY<1998

L6 9 S L5 AND (RRNA OR SPACER OR SPACERS)

regions and nonstandard A · G base pairs at several points.

L6 ANSWER 8 OF 9 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 1985:403673 BIOSIS
DN PREV198580073665; BA80:73665
TI CLONED RIBOSOMAL RNA GENES FROM PSEUDOMONAS-AERUGINOSA AS PROBES FOR CONSERVED DNA SEQUENCES.
AU SCHLEIFER K H [Reprint author]; LUDWIG W; KRAUS J; FESTL H
CS LEHRSTUHL FUER MIKROBIOLOGIE, TECHNISCHE UNIVERSITAET MUENCHEN, D-8000 MUNICH 2, FEDERAL REPUBLIC OF GERMANY
SO International Journal of Systematic Bacteriology, (1985) Vol. 35, No. 3, pp. 231-236.
CODEN: IJSBA8. ISSN: 0020-7713.
DT Article
FS BA
LA ENGLISH
AB **rRNA** genes were isolated from a PstI digest of P. **aeruginosa** chromosomal DNA, cloned in Escherichia coli and used as probes for conserved gene sequences. Recombinant plasmid pHF1 contained an 8800-base pair insertion containing 5, 16 and 23S **rRNA** genes. One constructed subclones of pHF1 containing parts of the 16S and 23S **rRNA** genes (pHF1.1) and parts of the 23S and **5S** **rRNA** genes (pHF 1.2). DNA-DNA hybridization experiments in which one used filter-bound chromosomal DNA from various bacteria and 35S-labeled plasmid **rRNA** genes (rDNA) indicated that the homology values reflected the actual phylogenetic distances to P. **aeruginosa**. Compared with oligonucleotide sequence analysis of 16S **rRNA**, a good correlation was found between DNA-rDNA homology values and SAB (similarity coefficient of 16S rRNAs) values above 0.4. The use of rDNA instead of **rRNA** in hybridization experiments offers several advantages; e.g., rDNA can easily be labeled in vitro and the degree of relatedness can be expressed in terms of percent homology and does not have to be determined by laborious measurement of thermal stability, as in the case of **rRNA**.

L6 ANSWER 7 OF 9 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 1986:377607 BIOSIS
DN PREV198682072583; BA82:72583
TI SEQUENCE OF 5S RIBOSOMAL RNA OF PSEUDOMONAS-PUTIDA AND ITS POSSIBLE SECONDARY STRUCTURE.
AU KOH M [Reprint author]; PARK I; LEE S Y
CS DEP CHEM, SEOUL NATL UNIV, SEOUL, KOREA
SO Korean Biochemical Journal, (1986) Vol. 19, No. 1, pp. 61-66.
CODEN: KBCJAK. ISSN: 0368-4881.
DT Article
FS BA
LA ENGLISH
ED Entered STN: 20 Sep 1986
Last Updated on STN: 20 Sep 1986
AB We have determined the sequence of **5S rRNA** of Pseudomonas putida by enzymatic and chemical degradation methods. P. putida **5S rRNA** has a chain length of 120 nucleotides. It contains no modified nucleoside. Homologies among **5S** rRNAs of P. putida, P. **aeruginosa**, and P. fluorescens are higher than 85% of the total sequence. Based on the information from nuclease S1 and RNase T1 treatment, a possible secondary structure of **5S rRNA** has been constructed. We have found two unstable helix regions and nonstandard A · G base pairs at several points.

L6 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:7846 CAPLUS
DN 122:25306
TI Characterization of contaminating DNA in Taq polymerase which occurs during amplification with a primer set for Legionella 5S ribosomal RNA
AU Maiwald, M.; Ditton, H. J.; Sonntag, H. G.; von Knebel Doeberitz, M.
CS Abt. Hyg. Med. Mikrobiol., Hygiene-Inst. Univ., Heidelberg, 69120, Germany
SO Molecular and Cellular Probes (**1994**), 8(1), 11-14
CODEN: MCPRE6; ISSN: 0890-8508
DT Journal
LA English
AB An amplification product that occurred in neg. controls of a PCR using a primer system for Legionella **5S rRNA** was characterized by direct sequencing. The amplification product did not hybridize to a Legionella specific oligonucleotide. It was derived from bacterial DNA contaminating Taq DNA polymerase, a phenomenon that was previously reported for amplification reactions with universal primer sets for bacterial 16S **rRNA**. The sequence of the **5S** ribosomal fragment had close homol. to the **5S rRNA** of the species of Pseudomonas fluorescens, Pseudomonas **aeruginosa**, Alcaligenes faecalis, and Azotobacter vinelandii. These findings confirm that the DNA contaminations in Taq DNA polymerase belong to species other than Thermus aquaticus or Escherichia coli.

L6 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1988:487133 CAPLUS
DN 109:87133
TI Nucleotide sequence of a gene for **5S** ribosomal RNA from Pseudomonas **aeruginosa**
AU Housiaux, Philip J.; Hill, Diana F.; Petersen, George B.
CS Dep. Biochem., Univ. Otago, Dunedin, N. Z.
SO Nucleic Acids Research (**1988**), 16(6), 2722
CODEN: NARHAD; ISSN: 0305-1048
DT Journal
LA English
AB A 4.5 kb fragment of DNA derived from a library of BamH1 fragments of P. aeruginosa strain K (ATCC 25102) cloned into plasmid pUC9 was shown by hybridization with 32P-labeled 16 S and 23 S rRNAs to represent part of a RNA operon from that organism. The fragment has been sequenced by the chain termination method after fragmentation and subcloning into the sequencing vectors M13mp8 and M13mp9. A sequence corresponding to 5 S ribosomal (nucleotides 7-126) RNA was identified by homol. with the corresponding sequence from Escherichia coli.